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Sent: Mon 8/10/2015 3:22:13 PM
Subject: CO Spill - Clips

Associated Press (via US News)

<http://www.usnews.com/news/us/articles/2015/08/09/epa-no-health-risks-to-wildlife-after-colorado-mine-spill>

EPA: No health risks to wildlife after Colorado mine spill, but impact to humans still unknown

Ivan Moreno

August 9, 7:26 pm

DENVER (AP) — An Environmental Protection Agency official said Sunday she doesn't believe wildlife will suffer significant health impacts from the large volume of wastewater that spilled from an abandoned mine in southwestern Colorado.

The EPA also said the amount of heavy-metal laced wastewater that spilled from Colorado's Gold King Mine into the Animas River, turning the water a mucky orange and then yellow, is three times larger than its initial estimate.

The agency now says 3 million gallons spilled into the river Wednesday and Thursday, instead of 1 million. The revision came after the EPA used a stream gauge from the U.S. Geological Survey.

Four days after the EPA-caused spill, the agency has been unable to determine whether humans or aquatic life face health risks. However, EPA toxicologist Deborah McKean said the sludge moved so quickly after the spill that it would not have "caused significant health effects" to animals that consumed the water.

The discolored water from the spill stretched more than 100 miles from where it originated near Colorado's historic mining town of Silverton into the New Mexico municipalities of Farmington, Aztec and Kirtland.

The leading edge of the plume was headed toward Utah and Montezuma Creek near the town of Bluff, a tourist destination. The town, which is populated by a few hundred people, is surrounded by scenic sandstone bluffs.

Local officials were preparing to shut down two wells that serve Montezuma Creek, said Rex Kontz, deputy general manager for the Navajo Tribal Utility Authority.

To keep water flowing to homes, the residential tank in Halchita has been filled with clean water hauled 40 miles from Arizona.

Back in Colorado where the spill started, the EPA planned to meet with residents of Durango, downstream from the mine. The EPA water tests near Durango are still being analyzed.

The EPA has not said how long cleanup efforts will take. An EPA-supervised crew trying to enter the mine to pump out and treat the water caused the spill

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Denver Post

http://www.denverpost.com/news/ci_28612228/la-plata-and-durango-declare-emergency-sludge-flows

Animas River mine spill: La Plata and Durango declare state of emergency

Tom McGhee

August 9, 6:19pm

Three million gallons of water containing mining waste has poured into the Animas River since Wednesday, and it is still unclear what the environmental and health impact of the spill, caused by the Environmental Protection Agency, will be.

Water collected at sampling stations along Cement Creek and the upper Animas found higher-than-normal levels of arsenic and other heavy metals, Deborah McKean, an EPA toxicologist, said in a Sunday conference call with the media.

But the levels are dropping as the plume drifts farther down the river and is diluted. "Those concentrations increase for a few hours and then decrease again by the next sampling period," she said. "Those numbers are high and they are scary because they seem so high. However, risk associated with exposure to a chemical is a matter of how much of the chemical you are exposed to."

It remains unclear if the spill poses health risks to humans and aquatic life.

On Sunday, La Plata County and Durango both declared a state of emergency as a result of the spill, which originated at a mine near Silverton.

"This action has been taken due to the serious nature of the incident and to convey the grave concerns that local elected officials have to ensure that all appropriate levels of state and federal resources are brought to bear to assist our community not only in actively managing this tragic incident but also to recover from it," La Plata County Manager Joe Kerby said in a release.

On Sunday, the EPA posted reports on its website including sample data taken from the river at different locations that detail how much metal is in the water. Tom Dea, vice president for TZA Water Engineers in Lakewood, reviewed those reports for The Denver Post.

Dea said because the latest report on the site shows data from Aug. 6, it would be inaccurate to report on those numbers now since the data will be "continually changing" as the pollution makes its way through the water.

Wastewater from Gold King Mine started spilling after an EPA-supervised cleanup crew accidentally breached a debris dam inside the inactive mine last Wednesday. The EPA originally reported 1 million gallons spilled into the river. On Sunday, the agency revised that to 3 million gallons after the EPA used a stream gauge from the U.S. Geological Survey.

The mine continues to discharge about 500 gallons of water per minute into ponds, where it is being treated before it goes into Cement Creek, where it is carried into the river.

The city of Durango uses drinking water from the Animas. But an intake valve was turned off before contaminated water reached it, city officials said. "Your water never has been and never will be contaminated," Durango Mayor Dean Brookie said at a Sunday public forum, referring to the city's tap water. "Your water is safe to drink.

Some residents along the river who rely on wells for drinking water have told the EPA that their water is discolored. EPA teams are checking water in those locations, Mc Kean said. The agency is providing drinking water to those who need it.

Some toxins will settle on the river bottom, said Shaun McGrath, EPA regional chief. Future storms will kick up sediment, so the river will require continued monitoring.

The discolored water from the spill stretched more than 100 miles Sunday from where it originated, reaching the New Mexico municipalities of Farmington, Aztec and Kirtland.

The leading edge of the plume was headed toward Utah and Montezuma Creek near the town of Bluff, a tourist destination.

Officials were preparing to shut down two wells that serve Montezuma Creek, said Rex Kontz, deputy general manager for the Navajo Tribal Utility Authority.

At a Sunday public forum, citizens affected by the pollution peppered the EPA with questions, demanding answers to questions such as "what do I tell the employees of my river rafting business?" and "what are you doing now to address the long-term effects of this disaster?"

A representative from the Navajo Nation also took the stage to address the crowded room.

Navajo Nation President Russell Begaye has said he intends to sue the EPA for the massive release of mine waste, according to nativenewsonline.net.

Reuters

<http://www.reuters.com/article/2015/08/10/us-usa-colorado-spill-idUSKCN0QF01C20150810>

Wastewater spill from Colorado gold mine triples in volume: EPA

Steve Gorman

Aug 9. 8:52 pm

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Some 3 million gallons of toxic wastewater, triple previous estimates, have poured from a defunct Colorado gold mine into local streams since a team of Environmental Protection Agency workers accidentally triggered the spill last week, EPA officials said on Sunday.

The discharge, containing high concentrations of heavy metals such as arsenic, mercury and lead, was continuing to flow at the rate of 500 gallons per minute on Sunday, four days after the spill began at the Gold King Mine, the EPA said.

An unspecified number of residents living downstream of the spill who draw their drinking supplies from their private wells have reported water discoloration, but there has been no immediate evidence of harm to human health, livestock or wildlife, EPA officials told reporters in a telephone conference call.

Still, residents were advised to avoid drinking or bathing in water drawn from wells in the vicinity, and the government was arranging to supply water to homes and businesses in need.

The spill began on Wednesday after an EPA inspection team was called to the abandoned mine near the town of Silverton in southwestern Colorado to examine previously existing wastewater seepage.

As workers excavated loose debris at the site, they inadvertently breached the wall of a mine tunnel, unleashing a flow of the orange-tinged slurry that cascaded into Cement Creek and then into the Animas River downstream.

The town of Durango, Colorado, roughly 50 miles south of the spill site, shut off its intakes of river water as a precaution, according to the EPA.

By Friday, the main plume of the spill had traveled some 75 miles south to the New Mexico border, prompting utilities in the towns of Aztec and Farmington to shut off their intakes from the Animas as well, local authorities said.

Agency officials said they were consulting with representatives of the Navajo Nation, whose sprawling reservation borders Farmington and the San Juan River, which is fed by the Animas River and has also been tainted by the spill.

EPA previously estimated 1 million gallons of wastewater had been released since Wednesday, but on Sunday the agency revised that up to 3 million gallons, based on measurements taken at a U.S. Geological Survey stream gauge.

In recent days, EPA has been diverting the ongoing release into two newly built settling ponds where the waste was being treated with chemicals to lower its acidity and to filter out dissolved solids before being discharged to Cement Creek.

The creek's water quality has already been badly degraded from a long history of acid mine drainage in the area, agency officials said.

Preliminary water sampling from the creek and Animas River showed that concentrations of heavy metals briefly spiked in areas reached by the wastewater plume but appeared to clear considerably once it had passed downstream, EPA regional Administrator Shaun McGrath said.

EPA officials said that by Sunday, a delineated "leading edge" of the contamination flow was no longer visible from aerial surveys, indicating concentrations of wastewater were diminishing.

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The Wall Street Journal

<http://www.wsj.com/articles/colorado-spill-impact-widens-1439163937>

Colorado Spill Impact Widens

Officials estimate about three million gallons of wastewater spilled into the Animas River

Jacob Gershman

Aug 9, 7:45

Authorities scrambled to assess the impact of a toxic surge of wastewater from an abandoned gold mine in southwestern Colorado during a botched cleanup by the U.S. Environmental Protection Agency.

The agency apologized for the breach it caused, which sent mustard-colored sludge down the Animas River, and also for its delayed response, which drew harsh criticism from state authorities and residents.

Officials now estimate about three million gallons of wastewater spilled into the river from Gold King Mine north of Silverton, Colo., in the San Juan Mountains after an EPA cleanup crew accidentally breached a debris dam Wednesday morning.

The sludge spilled into a creek and then filled the Animas River, flowing past the city of Durango and into New Mexico, emptying into the San Juan River over the weekend.

On Sunday, Durango and surrounding La Plata County declared a state of local emergency because of the contamination of the Animas River.

"This action has been taken due to the serious nature of the incident and to convey the grave concerns that local elected officials have to ensure that all appropriate levels of state and federal resources are brought to bear to assist our community not only in actively managing this tragic incident but also to recover from it," said La Plata County Manager Joe Kerby.

The Animas River, a popular spot for rafting, kayaking and fly fishing, remained closed for recreational use Sunday, while the EPA treated drainage at the mine site and analyzed contaminant levels in water samples.

The agency said the water contains substances such as lead and arsenic that, depending on levels of concentration, could pose a threat to human safety and wildlife. By Sunday, the river appeared more translucent, as the leakage rate slowed to about 500 gallons a minute from 740 gallons a minute on Friday—but about double the rate of discharge before the accident.

EPA toxicologist Deborah McKean said Sunday that initial tests showed "scary" levels of toxicity in the water but added the potential danger hinges on how long it takes for them to return to normal. At the time of the accident, EPA officials were investigating the source of pollutants oozing from the mine for years.

In a meeting with frustrated residents in La Plata County on Friday, EPA officials apologized for causing the spill and for initially playing down its scope.

"This is a huge tragedy," Dave Ostrander, EPA regional director of emergency preparedness, told residents. "We typically respond to emergencies; we don't cause them."

EPA officials said they were caught off guard by the amount of toxic wastewater that had accumulated inside the mine and were conducting a review of what went wrong in their hazard analysis prior to working on the site.

"We weren't anticipating the impact we were going to have downstream," said Shaun McGrath, the head EPA administrator for the region. "Unfortunately, some of our earlier comments sounded cavalier about the public health concern."

Gold King is one of thousands of abandoned hard rock mines in the western U.S.—some dating back to the 19th-century Gold Rush—that left behind a legacy of waterway-threatening pollution that could take years and billions of dollars to clean up. The mine is owned by San Juan Corp., in Golden, Colo., and hasn't operated since 1923, according to Ronald R. Hewitt Cohen, an associate professor at the Colorado School of Mines.

The company said that the EPA was operating under an access agreement and that when the agency was removing backfill from the portal to the mine, a "plug blew out releasing contaminated water behind the backfill into the Animas River."

By Saturday, the sludge had reached the San Juan River, a tributary of the Colorado River near Farmington, N.M.

Ryan Flynn, secretary of New Mexico's Environment Department, said the EPA alerted the state about the spill about 24 hours after Wednesday's burst, delaying New Mexico's response effort.

"They were really downplaying the issue," Mr. Flynn said. "There will be time for accountability. We're unhappy, but at this time were trying to control the situation."

The seven water systems in the area have reserves good for 30 to 90 days, he said. The state has warned rural residents in the floodplain area who rely on unregulated private wells not to consume or cook with their water. Many of those residents are low-income Hispanics and members of the Navajo Nation, he said. Local farmers closed gates to ditches used for irrigation.

The Mountain Studies Institute research center in Silverton said small insects in the river near Durango were still alive 20 hours after exposure to the sediment and heavy metals, a sign that the short-term impact on aquatic life may not be as damaging as feared.

Colorado Parks and Wildlife officials said they were monitoring fish in test cages submerged in the river.

Aaron Kimple, a program director at the institute, said the sludge could leave behind lower levels of contaminants that could disrupt wildlife in years to come.

"One of the big questions is how long does it linger," he said.

Monday, August 10, 2015

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Associated Press (via US News and World Report)

<http://www.usnews.com/news/us/articles/2015/08/10/epa-colorado-mine-waste-spill-larger-than-first-reported>

EPA: Colorado mine waste spill much larger than originally estimated

Ivan Moreno

August 10, 4:05am

DENVER (AP) — The Environmental Protection Agency says the mine waste spill into Colorado waters is much larger than originally estimated.

But an EPA official said Sunday that she doesn't believe wildlife will suffer significant health impacts from the wastewater from an abandoned mine in southwestern Colorado.

The agency said the amount of heavy-metal laced water that leaked from the Gold King Mine into the Animas River, turning the water a mucky orange and then yellow, is three times larger than its initial estimate.

The EPA now says 3 million gallons of wastewater spilled Wednesday and Thursday, instead of 1 million. The revision came after the EPA used a stream gauge from the U.S. Geological Survey.

The agency has so far been unable to determine whether humans or aquatic life face health risks. However, EPA toxicologist Deborah McKean said the sludge moved so quickly after the spill that it would not have "caused significant health effects" to animals that consumed the water.

The discolored water from the spill stretched more than 100 miles from where it originated near Colorado's historic mining town of Silverton into the New Mexico municipalities of Farmington, Aztec and Kirtland.

The leading edge of the plume was headed toward Utah and Montezuma Creek near the town of Bluff, a tourist destination. The town, which is populated by a few hundred people, is surrounded by scenic sandstone bluffs.

Local officials were preparing to shut down two wells that serve Montezuma Creek, said Rex Kontz, deputy general manager for the Navajo Tribal Utility Authority.

To keep water flowing to homes, the residential tank in Halchita has been filled with clean water hauled 40 miles from Arizona.

Back in Colorado where the spill started, the EPA planned to meet with residents of Durango, downstream from the mine. The EPA water tests near Durango are still being analyzed.

The EPA has not said how long cleanup efforts will take. An EPA-supervised crew trying to enter the mine to pump out and treat the water caused the spill

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CNN

<http://www.cnn.com/2015/08/09/us/colorado-epa-mine-river-spill/>

EPA spill: 'The magnitude of it, you can't even describe it'

Dana Ford

August 10, 6:30 AM

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(CNN)The city of Durango and La Plata County, Colorado, have declared a state of emergency after a federal cleanup crew accidentally released mine waste into the water.

An estimated 1 million gallons of waste water spilled out of an abandoned mine area in the southern part of the state last week, turning the Animas River orange and prompting the Environmental Protection Agency to tell locals to avoid it.

"This action has been taken due to the serious nature of the incident and to convey the grave concerns that local elected officials have to ensure that all appropriate levels of state and federal resources are brought to bear to assist our community not only in actively managing this tragic incident but also to recover from it," said La Plata County Manager Joe Kerby.

According to the EPA, the spill occurred when one of its teams was using heavy equipment to enter the Gold King Mine, a suspended mine near Durango. Instead of entering the mine and beginning the process of pumping and treating the contaminated water inside as planned, the team accidentally caused it to flow into the nearby Animas River. Before the spill, water carrying "metals pollution" was flowing into a holding area outside the mine.

Colorado Parks and Wildlife officials have been watching for any effects on wildlife since the incident began on Wednesday. They are optimistic that the effects of the spill on terrestrial wildlife will be minimal, the EPA said. Fish are more sensitive to changes in water.

Officials said they believe the spill carried heavy metals, mainly iron, zinc and copper, from the mine into a creek that feeds into the Animas River. From there, the orange water plugged steadily along through the small stretch of winding river in southern Colorado and across the state border to New Mexico where the Animas meets the San Juan River.

New Mexico Gov. Susana Martinez was in Farmington over the weekend to tour the damage.

"The magnitude of it, you can't even describe it," she said, CNN affiliate KRQE reported. "It's like when I flew over the fires, your mind sees something it's not ready or adjusted to see."

The affiliate spoke to Rosemary Hart, who lives on the Animas River. Her family reportedly depends on a well to get water, and the spill has made the water unusable.

"We came out here together, and we looked at the river and we cried," Hart told KRQE.

The EPA and the New Mexico Environment Department said they will test private domestic wells near the Animas to identify metals of concern from the spill.

Tests on public drinking water systems are conducted separately by the state environment department, the agencies said.

LA Times

<http://www.latimes.com/nation/nationnow/la-na-nn-animas-river-toxic-spill-20150809-story.html>

Colorado river spill underscores threat of old hard-rock mines

David Kelly

August 10, 3:00 AM

Keena Kimmel's bookshop occupies a cozy curve along the Animas River, a place of wild sunflowers and lilacs where fisherman try their luck and kayakers glide under iron bridges.

But this weekend the river was empty and Kimmel's heart broken.

"Years ago I was passing through on the way to Oregon and ended up staying because it was so beautiful," she said, gazing over the vacant waters. "I can't believe what's happened. I guess I'm still kind of in shock."

Shock, sadness and anger have gripped this pretty college town in southwestern Colorado as residents struggle to understand the slow-moving environmental disaster that has transformed their crystal clear Animas River — or the River of Souls, translated from its Spanish name — into a ribbon of mustard yellow sludge.

The tragedy in Durango underscores the persistent menace of defunct hard-rock mines, lingering like cancers across the American landscape.

It's difficult emotionally and economically to see the river damaged like that.

- Alex Mickel, owner of Mild to Wild, a Durango, Colo., rafting company

And for those with livelihoods put on hold, or possibly destroyed, by the spill, seeing the disaster unfold is made even more difficult because the culprits were their own government.

On Wednesday, the Environmental Protection Agency was supervising the draining of contaminated water from the defunct Gold King Mine above the town of Silverton. The water suddenly surged, overwhelming the crew and spilling into a tributary leading to the Animas River. The EPA initially estimated the spill at 1 million gallons, but tripled it to 3 million gallons Sunday.

A slew of heavy metals — cadmium, aluminum, copper and perhaps even arsenic — turned the water a sickly fluorescent yellow. Local officials immediately ordered the river shut down.

"I want to come clean here," EPA Regional Administrator Shaun McGrath said at a public meeting in Durango on Friday. "Our initial assessment of this was inappropriate in that we did not know what we were dealing with here. Some of our earlier comments may have sounded cavalier about the impact to public health and wildlife."

McGrath said at a public meeting Sunday that officials had tripled the estimate of the toxic spill based on data from a U.S. Geological Survey water gauge downstream. He said that the leading edge of the plume could no longer be seen from the air and that Cement Creek, which carried the sludge into the Animas, appeared to be running clear.

Durango and La Plata County proclaimed states of emergency Sunday. Gov. John Hickenlooper plans to come to the area Tuesday, officials said.

Meanwhile, the plume has flowed downstream to Aztec and Farmington, N.M., and is expected to reach the San Juan River, Lake Powell and eventually the Colorado River.

Business owner

Keena Kimmel owns a bookshop along the Animas River in Colorado. "I can't believe what's happened," she said. "I guess I'm still kind of in shock." (David Kelly / For The Times)

"Honestly, it's a complete catastrophe and we don't even understand the full significance of it yet," said Ian Lenney, 23, who studies environmental science at Fort Lewis College in Durango and works at a health food store. "I don't plan to swim in the river for years. I don't plan to eat fish from the river. These heavy metals stick around and get into the food chain. I think you'll see fish and wildlife die-offs."

So far there are no reports of die-offs. In fact, state wildlife officials put out 108 trout in cages throughout the river and reported just one death.

Lenney seemed stunned by the EPA's role in the accident.

"You'd think a federal agency would be a lot more cautious, that there would be double and triple redundancies to prevent something like this," he said. "Who do you run to when your own government is at fault? We are all going to pay. Maybe we set ourselves up for this by not acting to clean these sites sooner."

The danger posed by mines was laid out in a 1993 report from the Mineral Policy Center, a Washington think tank dedicated to identifying threats to natural resources. The study said there were about 557,650 of these sites in 32 states and 50 billion tons of untreated waste covering public and private land. The waste included arsenic, asbestos, cadmium, cyanide and mercury.

"Mine effluents have already polluted 12,000 miles of the nation's waterways and 180,000 acres of our lakes and reservoirs and are a growing threat to underground aquifers," the report said.

About 40% of all Western headwater streams are polluted by old hard-rock mines, the EPA has said. Colorado has 22,000 such mines, ranking third behind Arizona and Nevada. Cleaning them up is difficult because the owners are often dead or unknown. Even if they are alive, many fear making matters worse by trying to remedy the situation, as the EPA just did.

Early mining techniques were all about speed and efficiency, with little or no regard for the environmental consequences.

For example, the Sierra Fund's 2008 report titled "Mining's Toxic Legacy" said that millions of gallons of mercury were used to extract gold from ore and that untold tons of waste rock were left to leak their toxic contents into rivers and streams.

And as Gold King shows, the legacy lives on.

Many here believe the EPA had good intentions in trying to clean out the mine but faulty methods. And those methods could cost the city and entire region for years to come. The heavy metals in the plume will settle to the river bottom and get stirred up again and again by rains and runoff.

"We will have to do long-term monitoring and probably more closures in the future," said the EPA's McGrath.

That could be bad news for those who make their living on the 126-mile-long river.

"It's difficult emotionally and economically to see the river damaged like that," said Alex Mickel, owner of Mild to Wild, Durango's biggest rafting company. "We were doing 230 people a day until Wednesday. We have already had to cancel hundreds of reservations."

Mickel expects the EPA to compensate him for his loss, which he estimates at \$150,000 so far.

"They tried to do the right thing but failed to follow their own procedures — they admitted that — so they need to help the community economically," he said.

The waters have eerily changed colors as the plume advances, going from canary yellow to mustard to brown. "To tell you the truth, what happened here is sickening," said resident Nathan Arnold, 30. So many people depend on the river: fishing guides, hotel workers, kayak operators, farmers.

"The river is the lifeblood of the Four Corners," Arnold said, referring to the area where Colorado, New Mexico, Arizona and Utah meet.

The big question is whether the river will come back.

"At one point in the 1950s, the Animas was declared dead, and then it became a gold medal trout stream 30 years later," Mickel said. "I don't think we will need to wait another 30 years."

Looking at the jaundiced river on Saturday, it was hard to imagine revival any time soon.

Not only were the people missing, so were the birds and other animals. Earlier that morning, a group of people prayed at the water's edge for divine help in healing the river. They too were awaiting answers.

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New York Times

http://www.nytimes.com/2015/08/11/us/durango-colorado-mine-spill-environmental-protection-agency.html?_r=0

Anger Rises as E.P.A. Increases Estimate of Toxic Water Spill at Colorado Mine

Julie Turkewitz

Aug 10

DURANGO, Colo. — Anger over a spill of toxic water from a mine that turned this community's river into a yellow-orange ribbon rose on Sunday when the Environmental Protection Agency announced that the spill was three times larger than previously stated — and that the agency was still unsure if the polluted water posed a health threat to humans or animals.

The agency, typically charged with responding to toxic disasters, has claimed responsibility for the spill, which unleashed a chemical brew that caused levels of arsenic, lead and other metals to spike in the Animas River, a tributary that plays a vital role in the culture and economy in this patch of southwestern Colorado.

Agency officials said on Sunday that the size of the spill was larger than originally estimated: more than three million gallons rather than one million.

La Plata County and the City of Durango have declared states of emergency, and the county estimates that about 1,000 residential water wells could be contaminated. The river is closed indefinitely, and the La Plata sheriff has hastily recast his campaign signs into posters warning river visitors to stay out of the water.

The yellow plume has traveled down to New Mexico, where it is being tracked, but it is starting to dissipate, officials said.

On Sunday night, residents packed a school auditorium in Durango for a meeting with the agency's regional director, Shaun McGrath. During a public comment session that lasted more than two hours, residents flouted a sign on the wall that instructed the auditorium's typical patrons — middle schoolers — to refrain from calling out, jumping up or insulting others during assemblies.

Shouts rang out. A few people cried. One resident questioned whether the agency had refashioned itself into the "Environmental Pollution Agency." Others demanded to know what would happen to wildlife, livestock, water wells, sediment and river-based jobs.

"When — when can we be open again?" said David Moler, 35, the owner of a river-rafting company who had approached a microphone. "All I hear is a handful of 'gonna-dos,' " he added. "What should I tell my employees?"

Mr. McGrath and his colleagues urged patience and assured residents that they would provide information about health risks once they had it. The agency, he said, is awaiting test results to determine whether the water poses a risk.

"We're going to continue to work until this is cleaned up," Mr. McGrath said, "and hold ourselves to the same standards that we would anyone that would have created this situation."

On Aug. 5, a team from the Environmental Protection Agency was investigating an abandoned mine about 50 miles north of here. Called the Gold King, it was last active in the 1920s, but it had been leaking toxic water at a rate of 50 to 250 gallons a minute for years. It is owned by a group called the San Juan Corporation.

A call to the company's lawyer was not returned.

The agency had planned to find the source of the leak in the hope of one day stanching it. Instead, as workers used machinery to hack at loose material, a surprise deluge of orange water ripped through, spilling into Cement Creek and flowing into the Animas. The burst did not injure workers.

The next day, as the neon water slid into Durango, masses of community members watched from the riverbanks. Some called it a painful procession: The Animas River is considered the cultural soul of this region, a sort of moving Main Street that hosts multiple floating parades a year and is typically bustling with rafters and kayakers.

Children study the river. Sweethearts marry on its banks. Its former name, given by Spaniards, is Río de las Ánimas, coincidentally, "River of Souls."

On Sunday, State Senator Ellen Roberts, a Republican who lives near the river, cried softly as she considered the pollution, adding that she had dropped her father's ashes in its depths.

"It is not just a scenic destination," Ms. Roberts said. "It is where people literally raise their children. It is where the farmers and ranchers feed their livestock, which in turn feeds the people. We're isolated from Denver through the mountains. And we are pretty resourceful people. But if you take away our water supply, we're left with virtually no way to move forward."

There are about 200 abandoned mines in the Animas watershed, the last of which closed in the early 1990s. Colorado has about 23,000 abandoned mines; the United States has an estimated 500,000. Since the 1870s, metal mining has both enriched and poisoned this region, turning the earth under portions of southwest Colorado into a maze of tunnels and leaving behind shuttered sites oozing with chemicals.

The Animas region is distinct in that it has an organization called the Animas River Stakeholders Group, a loose coalition of mining companies; environmental groups; property owners; and local, state and federal government entities that have worked together since 1994 to clean up some of these sites.

In recent years, the group had identified the Gold King as one of the two most polluted mine sites, and some have pushed to figure out the sources of its chemical bleed, believing that a cleanup was necessary. The Environmental Protection Agency was moving ahead with that project — without its partners — when the spill occurred.

Washington Post

<http://www.washingtonpost.com/news/morning-mix/wp/2015/08/10/epa-estimated-leak-of-mine-waste-into-colo-river-tripled-to-3-million-gallons/>

EPA: Estimated leak of mine waste into Colo. river tripled to 3 million gallons

Greg Kendall-Ball

August 10, 2:04 am

The Environmental Protection Agency now estimates 3 million gallons of mine waste has leaked into Colorado's Animas River from an accidental breach of a retaining dam last week, three times the amount previously disclosed.

The contaminated sludge, which was initially released from the Gold King Mine near Silverton, Colo., by agency workers last Wednesday and Thursday, has reached Farmington, N.M., more than 100 miles downriver. The EPA said Sunday that the mine continued to discharge the waste, which contained arsenic, lead and mercury among other heavy metals, at a rate of 500 gallons per minute, according to Reuters. The EPA has been diverting the ongoing spill into two new settling ponds where the waste is being treated to lower its acidity before being discharged into a tributary, Reuters also reported.

Analysis of the spill is ongoing and while it remains unclear what health risks humans or animals face from the contaminated water, EPA toxicologist Deborah McKean said the sludge moved so quickly after the spill that it would not have "caused significant health effects" to animals that consumed the water, according to the Associated Press.

The contaminated water plume is traveling through the lands of the Navajo Nation Reservation, which stretches over 27,000 square miles in the Four Corners region of Colorado, New Mexico, Utah and Arizona. Navajo President Russell Begaye said the spill is impacting the livelihoods of his people, and has instructed the nation's attorney general to begin preparations to file suit against the EPA. The Navajo Nation Commission on Emergency Management has also declared a state of emergency in response to the spill, the Farmington, N.M., Daily Times reported.

The EPA has not said how long cleanup efforts will take, the Associated Press reported. The EPA is looking into getting the area designated as a SuperFund cleanup site, according to the Daily Times.